

BIBLIOGRAPHIE RECHERCHE COVID 19

IMAGERIE

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DR ELIE MOUSSEaux, HÔPITAL EUROPÉEN GEORGES POMPIDOU

JOURNAL AUTEUR	TITRE	PRINCIPALE QUESTION	POINTS CLES
Radiology Feb 26 2020 Ai T, et al	Correlation of Chest CT and RT-PCR Testing in Coronavirus Disease 2019 (COVID-19) in China: A Report of 1014 Cases	To investigate the diagnostic value and consistency of chest CT as compared with comparison to RT-PCR assay in COVID-19	<p>The positive rates of RT-PCR assay and chest CT imaging in our cohort were 59% (601/1014), and 88% (888/1014) for the diagnosis of suspected patients with COVID-19, respectively.</p> <p>With RT-PCR as a reference, the sensitivity of chest CT imaging for COVID-19 was 97%. By analysis of serial RT-PCR assays and CT scans, the mean interval time between the initial negative to positive RT-PCR results was 5.1 ± 1.5 days.</p> <p>Chest CT has a high sensitivity for diagnosis of COVID-19. Chest CT may be considered as a primary tool for the current COVID-19 detection in epidemic areas.</p> <p>Une limite importante de l'étude est que nous ne connaissons pas la symptomatologie et le profil des sujets à l'inclusion.</p>

<p>Radiology Mar 10 2020</p> <p>Bay HX et al</p>	<p>Performance of radiologists in differentiating COVID-19 from viral pneumonia on chest CT</p>	<p>To assess the performance of chest CT in differentiating COVID-19 from viral pneumonia. 219 patients with both positive COVID-19 by RT-PCR from Hunan were blindly compared to 205 patients with positive Respiratory Pathogen Panel for viral pneumonia and CT findings consistent with or highly suspicious for pneumonia by original radiologist interpretation from US</p>	<p>Compared to non-COVID-19 pneumonia, COVID-19 pneumonia was more likely to have a peripheral distribution (80% vs. 57%, $p<0.001$), ground-glass opacity (91% vs. 68%, $p<0.001$), fine reticular opacity (56% vs. 22%, $p<0.001$), and vascular thickening (59% vs. 22%, $p<0.001$), but less likely to have a central+peripheral distribution (14.% vs. 35%, $p<0.001$), pleural effusion (4.1 vs. 39%, $p<0.001$) and lymphadenopathy (2.7% vs. 10.2%, $p<0.001$).</p> <p>La différenciation entre une pneumonie COVID-19 et non COVID est souvent difficile sur le scanner même s'il existe des signes évocateurs du COVID en rapport avec la distribution des lésions.</p> <p>La partie du travail qui compare la performance de lecture des radiologues américains et des radiologues chinois n'a pas d'intérêt.</p>
<p>Lancet, 9 March 2020 Zhou et al</p>	<p>Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study</p>	<p>191 patients (included retrospectively), of whom 137 were discharged and 54 died</p>	<p>Pour l'imagerie, c'est la diffusion des lésions de consolidation et non pas celle des zones de verre dépoli qui est plus fréquent chez non survivants que chez les survivants (74 vs 53%, $p=0.0065$). Cette notion de diffusion des lésions pulmonaires de consolidation sur le scanner comme facteur de gravité sera constante dans les quelques papiers traitant de la survie et/ou du passage en réanimation.</p> <p>Cette information majeure est confirmée sur un papier de l'AJR cette semaine. Ainsi la diffusion de ces lésions de consolidation doit figurer dans les CR radiologiques.</p>

AJR
29 feb 2020

Salehi al

**Coronavirus
Disease 2019
(COVID-19): A
Systematic Review
of Imaging
Findings in 919
Patients**

This article includes a systematic literature search of PubMed, Embase (Elsevier), Google Scholar, and the World Health Organization database

Known features of COVID-19 on initial CT include bilateral multilobar ground-glass opacification (GGO) with a peripheral or posterior distribution, mainly in the lower lobes and less frequently within the right middle lobe. Follow-up CT in the intermediate stage of disease shows an increase in the number and size of GGOs and progressive transformation of GGO into multifocal consolidative opacities, septal thickening, and development of a crazy paving pattern, with the greatest severity of CT findings visible around day 10 after the symptom onset

Article fondamental pour tous les radiologues.